3-1

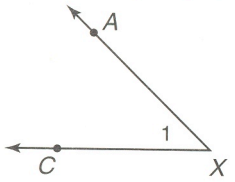
NAME _____ DATE _____ PERIOD _____

Skills Practice

Angles

Name each angle in four ways. Then identify its vertex and its sides.

1.



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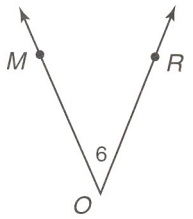
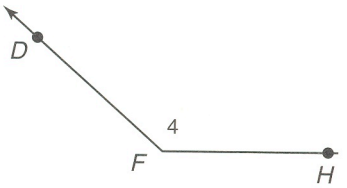
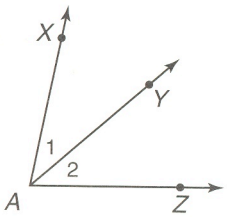


3.



Name all angles having A as their vertex.

4.



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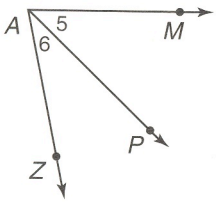

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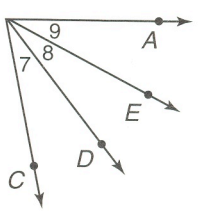
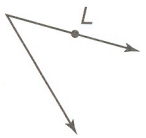


Tell whether each point is in the* interior, exterior *or* on *the angle.

7.



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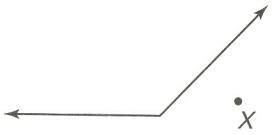

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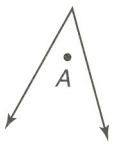

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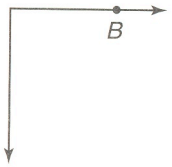
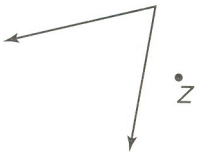


11.

12.



***Determine whether each statement is* true *or* false.**

13. The figure formed by opposite rays is sometimes referred to as a straight angle.

14. The vertex is in the exterior of an angle.

15. An angle separates the plane into two parts: the interior and the exterior of the angle.

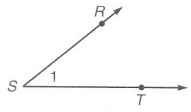
3-1

NAME _____ DATE _____ PERIOD _____

Study Guide

Angles

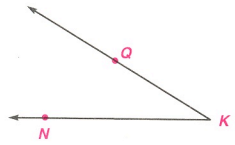
An **angle** is formed by two noncollinear rays with a common endpoint called a **vertex**. You could name the angle at the right as $\angle S$, $\angle RST$, $\angle TSR$, or $\angle 1$.



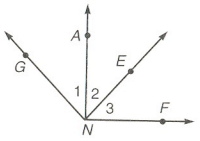
When two or more angles have a common vertex, you need to use either three letters or a number to name the angles. Make sure there is no doubt which angle your name describes.

Solve.

1. Label the three points K, N, and Q on the angle below so that the angle has sides $\overrightarrow{KQ}$ and $\overrightarrow{KN}$.

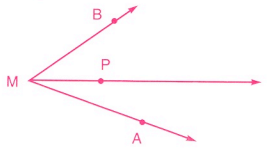


2. Name all angles having N as their vertex. ***∠1, ∠2, ∠3, ∠GNE, ∠GNF, ∠ANF***



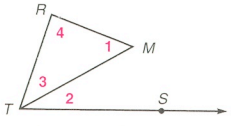
3. Draw $\angle BMA$ with sides $\overrightarrow{MB}$ and $\overrightarrow{MA}$ that has point P in its interior.

Sample answer:



4. Using the figure from Exercise 3, draw $\overrightarrow{MP}$. Name the two new angles formed. ***∠BMP, ∠PMA***

5. In the figure at the right, label angles 1, 2, 3, and 4 using the information below.
   $\angle RMT$ is $\angle 1$.
   $\angle MTS$ is $\angle 2$.
   $\angle RTM$ is $\angle 3$.
   $\angle TRM$ is $\angle 4$.



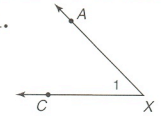
3-1

NAME _____ DATE _____ PERIOD _____

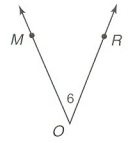
Skills Practice

Angles

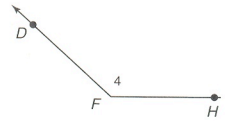
Name each angle in four ways. Then identify its vertex and its sides.

1. 

∠AXC, ∠CXA, ∠X, ∠1; X; $\overrightarrow{XA}$, $\overrightarrow{XC}$

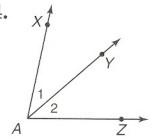
2. 

∠MOR, ∠ROM, ∠O, ∠6; O; $\overrightarrow{OR}$, $\overrightarrow{OM}$

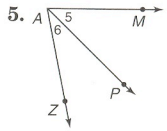
3. 

∠DFH, ∠HFD, ∠F, ∠4; F; $\overrightarrow{FH}$, $\overrightarrow{FD}$

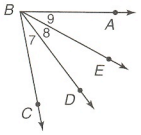
Name all angles having A as their vertex.

4. 

∠XAZ, ∠1, ∠2

5. 

∠MAZ, ∠5, ∠6

6. 

∠ABC, ∠ABD, ∠EBC, ∠7, ∠8, ∠9

Tell whether each point is in the* interior, exterior *or* on *the angle.

7. 

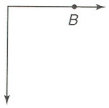
on

8. 

exterior

9. 

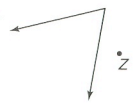
interior

10. 

on

11. 

exterior

12. 

exterior

***Determine whether each statement is* true *or* false.**

13. The figure formed by opposite rays is sometimes referred to as a straight angle. ***true***

14. The vertex is in the exterior of an angle. ***false***

15. An angle separates the plane into two parts: the interior and the exterior of the angle. ***false***